

**Notice of Allowability**

Application No.

10/791,663

Examiner

Linh V. Nguyen

Applicant(s)

CONFALONIERI ET AL.

Art Unit

2819

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/27/05.
2. ☒ The allowed claim(s) is/are 1-9 and 22-31.
3. ☒ The drawings filed on 27 June 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### **DETAILED ACTION**

1. This office action is in response to applicant's amendment filed on 6/27/05. Claims 22, 23, and 25 have been amended. Claims 26 – 31 have been added. Claims 1 – 9 and 22 – 31 are pending on this application.

#### ***Priority***

2. Certified copy of the priority documents submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file on 7/15/05.

#### ***Drawings***

3. The drawings were received on 6/27/05. These drawings are acceptable by the Examiner.

#### ***Allowable Subject Matter***

4. Claims 1 – 9 and 22 - 31 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claim 1, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest a digital to analog converter comprising summation means for generating the analog quantity as the sum of the second voltage and the product of the first voltage multiplied by the predetermined coefficient, comprising a summation circuit with resistive feedback means including a voltage divider; and wherein the means for transforming the current

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into a second voltage comprises a conversion resistor that forms part of the voltage divider.

With respect to claim 22, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest a digital to analog converter comprising a selection circuit that selectively connects one or more of the first and second plurality of current generators to the analog current output based on a combination of the less significant bit portion and the more significant bit portion of the input digital signal.

With respect to claim 25, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest a converter circuit comprising a feedback path comprises a first and second resistor connected to each other at a node to form a series voltage divider, the node in the feedback path being connected to the analog current output.

With respect to claim 28, in addition to other elements in the claim, the prior art considered individual or in combination, fails to fairly show or suggest a converter circuit comprising a first selection circuit operable to selectively connect one or more of the first plurality of current generators to source current to the analog current output based at least in part on the less significant bit portion of the input digital signals and a second selection circuit operable to selectively connected one or more of the second plurality of current generators to sink current from the analog current output based at least in part on the less significant bit portion of the input digital signal.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Prior Art***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (571) 272-1810. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Robert Pascal can be reached at (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (571-273-8300) for regular communications and (571-273-8300) for After Final communications.

08/09/05

Linh Van Nguyen

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A handwritten signature in black ink, appearing to read 'Linh Van Nguyen', is written over the typed name.